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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,233	10/09/2003	Xiaolan Ai	TIMK 8507U1	1025
1688	7590	06/01/2005	EXAMINER	
POLSTER, LIEDER, WOODRUFF & LUCCHESI 12412 POWERSCOURT DRIVE SUITE 200 ST. LOUIS, MO 63131-3615			TRIEU, THERESA	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/682,233	Applicant(s) AI ET AL.	
	Examiner Theresa Trieu	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/17/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the idler bearing" in line 12. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-12 are rejected under 35 U.S.C. 102(a) as being anticipated by Ogawa (Publication Number JP 2001-289315).

Regarding claims 1, 6, as shown in Fig. 2, Ogawa discloses an integrated speed reducer and gerotor pump assembly comprising:

a motor (47) providing torque at an elevated speed;

a speed reducer (35) configured for receiving torque at an elevated speed and increasing the torque to a reduced speed;

a gerotor pump (33, 34) coupled with the speed reducer for receiving the torque at the reduced speed for pumping fluids.

Regarding claims 2-5 and 7-12, Ogawa discloses the speed reducer comprises:

a carrier (42) having a plate and a spindle (38, 41) defining a spindle bore, a spindle slot and pin holes; at least one bearing (not numbered; however, clearly seen in Fig. 1) affixed to the spindle;

a sun roller (37) having an input end for receiving torque and a first raceway; at least one bearing (not numbered; however, clearly seen in Fig. 1) affixed to the sun roller (37) and engaged with the spindle bore;

a planetary roller (39) having an inner surface and a second raceway;

a support bearing (43) having an outer race and an inner race, such that the outer race of the support bearing engages the inner surface of the planetary roller (39) allowing the planetary roller to rotate freely;

an elastic insert (not numbered; however, clearly seen in Fig.1) having an outer surface and a center hole, such that the outer surface of the elastic insert engages the inner race of the support bearing (43);

a pin shaft engaged with the center hole of the elastic insert and inserted into the pin holes, such that the planetary roller (39), support bearing (43);

an outer ring (40) supported on the spindle (38, 41) of the carrier by at least one bearing having a front face, a back face, and a third raceway eccentric to the first raceway

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engaged with the second raceway so that torque is transferred from the second raceway to the third raceway and thereby converted to torque; and

an output plate shaft having a base plate affixed to the front face of the outer ring (40), and a driving shaft (36) coupled with the gerotor pump (34) so that the driving shaft transfers torque at a reduced speed from the outer ring to the gerotor pump (33, 34);

a housing (32) having a chamber, a recessed seat, a center hole, a gear bore eccentric to the center hole (not numbered; however, clearly seen in Fig. 1), a front face, and a back face affixed to the carrier (42) such that the speed reducer (35) and the gerotor pump (33, 34) share the housing;

an end cover (31a, 31b) having a mounting face affixed to the front face of the housing (32), an inlet chamber, an outlet chamber;

a seal seated with the recessed seat of the housing to prevent the transfer of fluids between the gerotor pump (33, 34) and the speed reducer (35);

a ring gear (33) rotatable seated within the gear bore of the housing having a plurality of internal teeth;

a rotor (34) having a center hole engaged with the speed reducer (35) for receiving torque at a reduced speed;

the output plate shaft further comprising opening in base plate for circulating the traction fluid.

Prior Art

The IDS (PTO-1449) filed on February 17, 2004 has been considered. An initialized copy is attached hereto.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of five patents: Tornebohm (U.S. Patent Number 2,066,952), Dean (U.S. Patent Number 3,115,791), Dickie (U.S. Patent Number 4,286,480), Miller et al. (U.S. Patent Number 4,549,449) and Souki et al. (U.S. Patent Number 6,672,267), each further discloses a state of the art.


Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 571-272-4868. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT


Theresa Trieu
Primary Examiner
Art Unit 3748